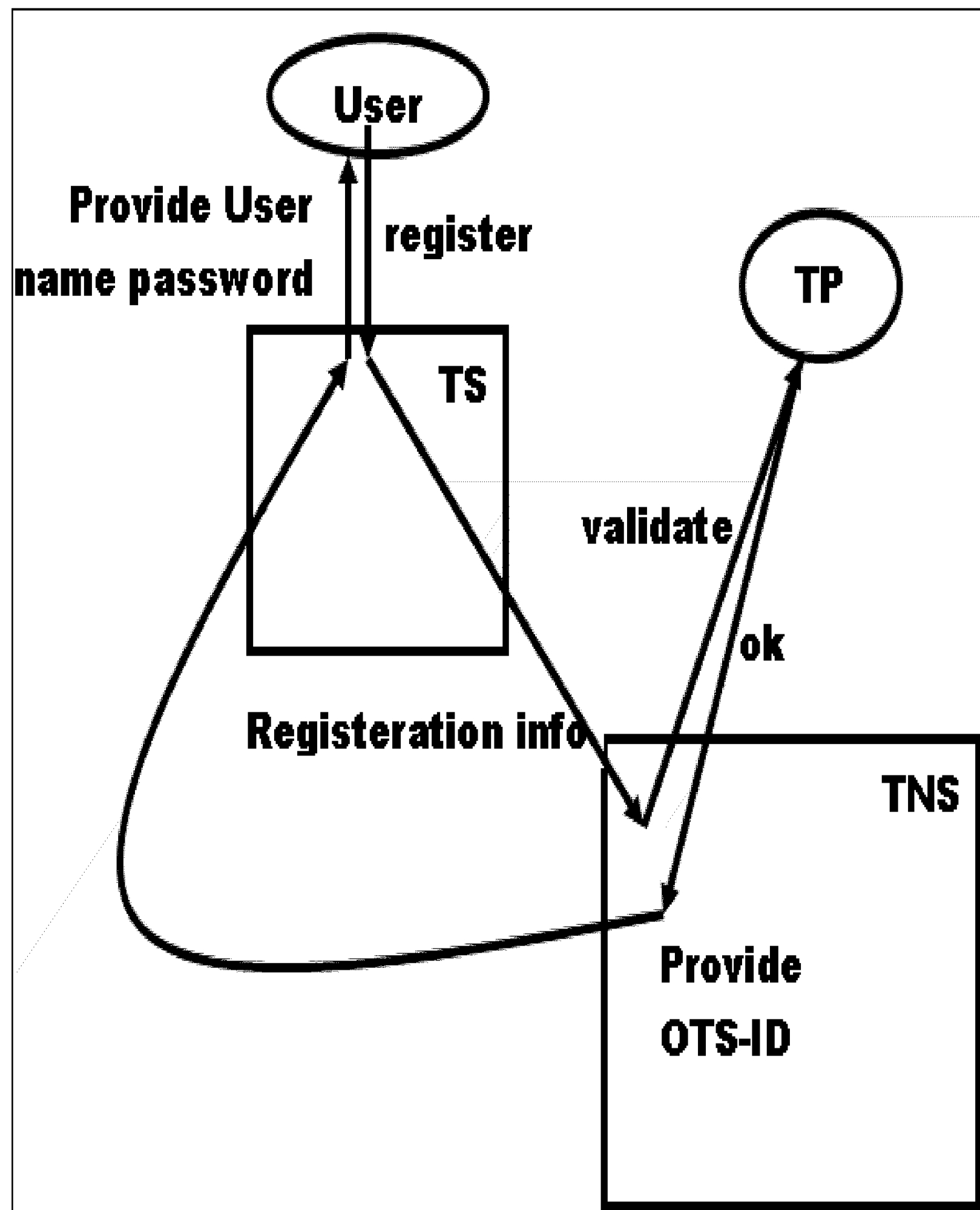
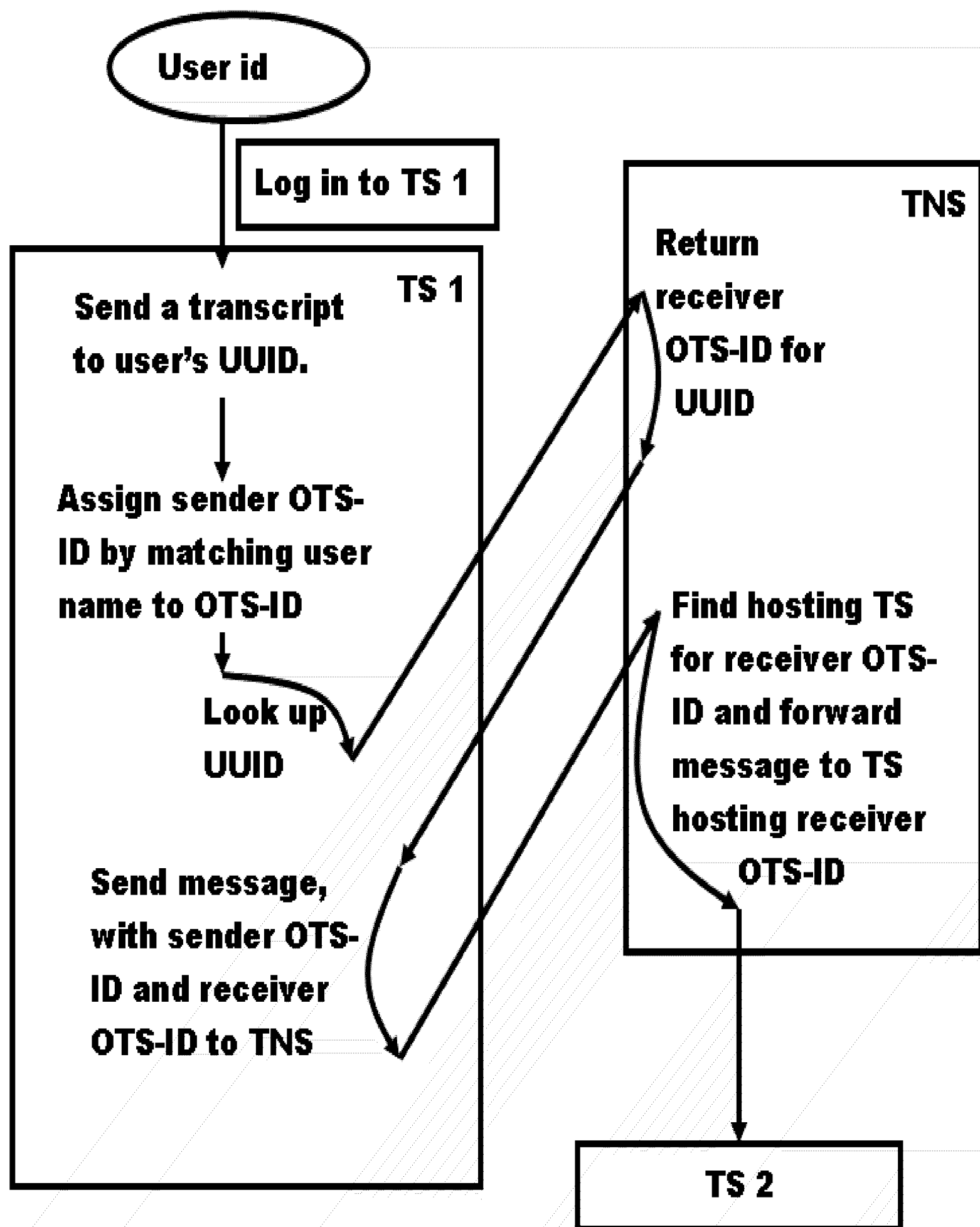


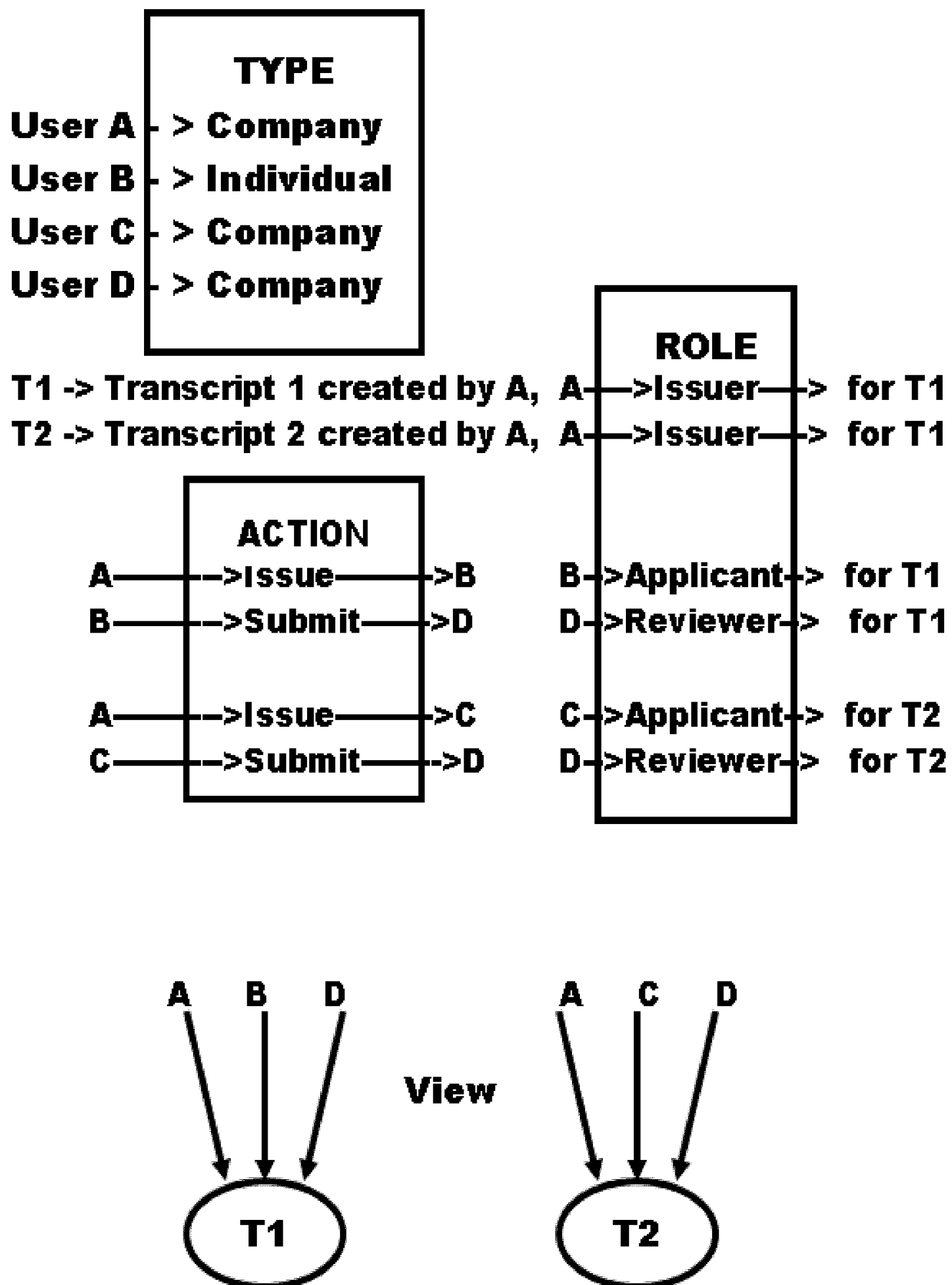
**Fig 1: Registration of a user to OTS** →



**Fig 2: communication in OTS** →



**Fig 3: User Types, Roles and Action** →



**Fig 4: RTL formation** →

**OTS-ID A -> Issuer of Transcript T1**

**OTS-ID B -> Applicant of Transcript T1**

**OTS-ID D -> Reviewer of transcript T1**

**A located on TS1**

**B located on TS2**

**D located on TS4**

**On TS1.**

**A-Table contains**

**RTL=123,**

**sender OTS-ID=self**

**123-transfer-table contains**

**local path=123/T1,**

**remote path=self,**

**remote OTS-ID=self**

**issue**

**On TS2.**

**B-Table contains**

**RTL=123@A,**

**sender OTS-ID=A**

**123@A-transfer-table contains**

**local path=123@A/T1,**

**remote path=123/T1,**

**remote OTS-ID=A**

**submit**

**On TS4.**

**D-Table contains**

**RTL=123@A@B,**

**sender OTS-ID=B**

**123@A@B-transfer-table contains**

**local path=123@A@B/T1,**

**remote path=123@A/T1,**

**remote OTS-ID=B**

**Fig 5: EFT OTM** →

**EFT OTM sent when TS1 issues to TS2**

**TS1**

**Type=EFT**  
**Sender OTS-ID=A**  
**Receiver OTS-ID=B**  
**RTL Name=123**  
**RTL Description="transcripts to B"**  
**Path1= 123/T1**  
**Role1= A:Issuer, B:Applicant**  
**Desc1="transcript T1"**

**TS2**

**EFT OTM sent when TS2 submits to TS4**

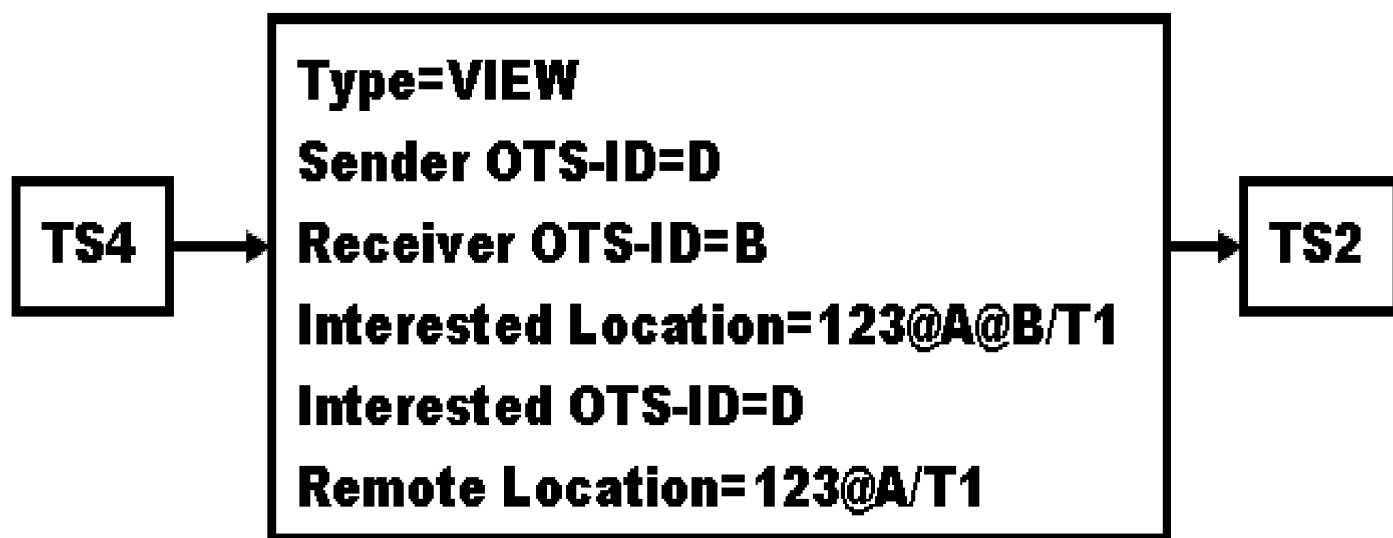
**TS2**

**Type=EFT**  
**Sender OTS-ID=B**  
**Receiver OTS-ID=D**  
**RTL Name=123@A**  
**RTL Description="transcripts to B"**  
**Path1= 123@A/T1**  
**Role1= A:Issuer, B:Applicant,**  
**D:Reviewer**  
**Desc1="transcript T1"**

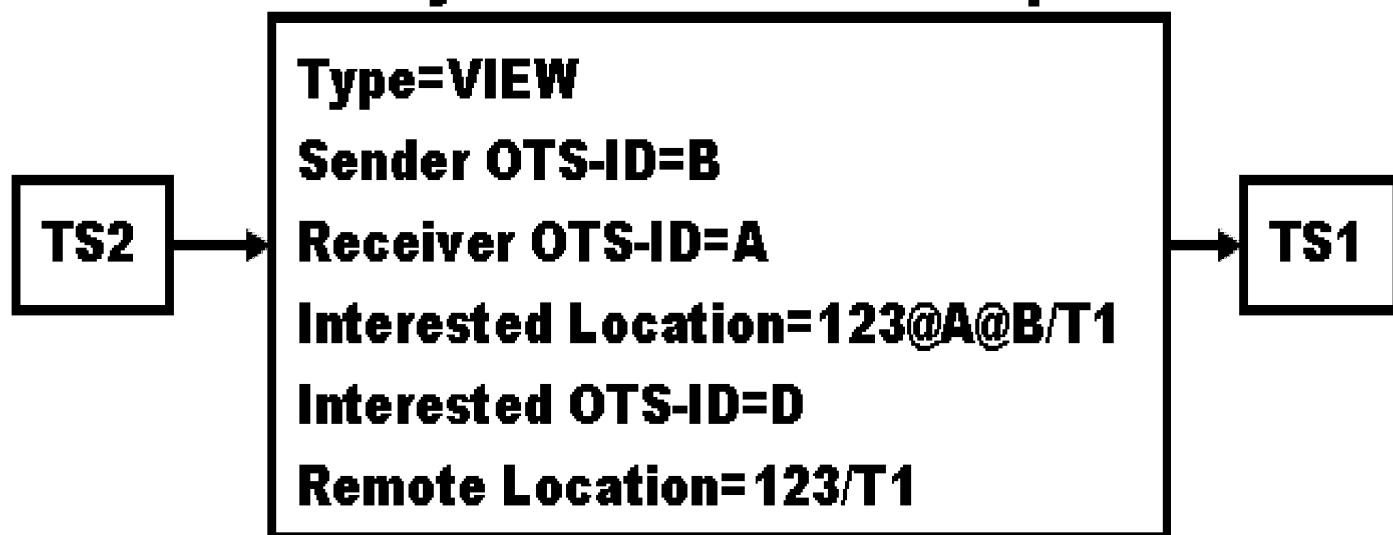
**TS4**

**Fig 6: VIEW OTM** →

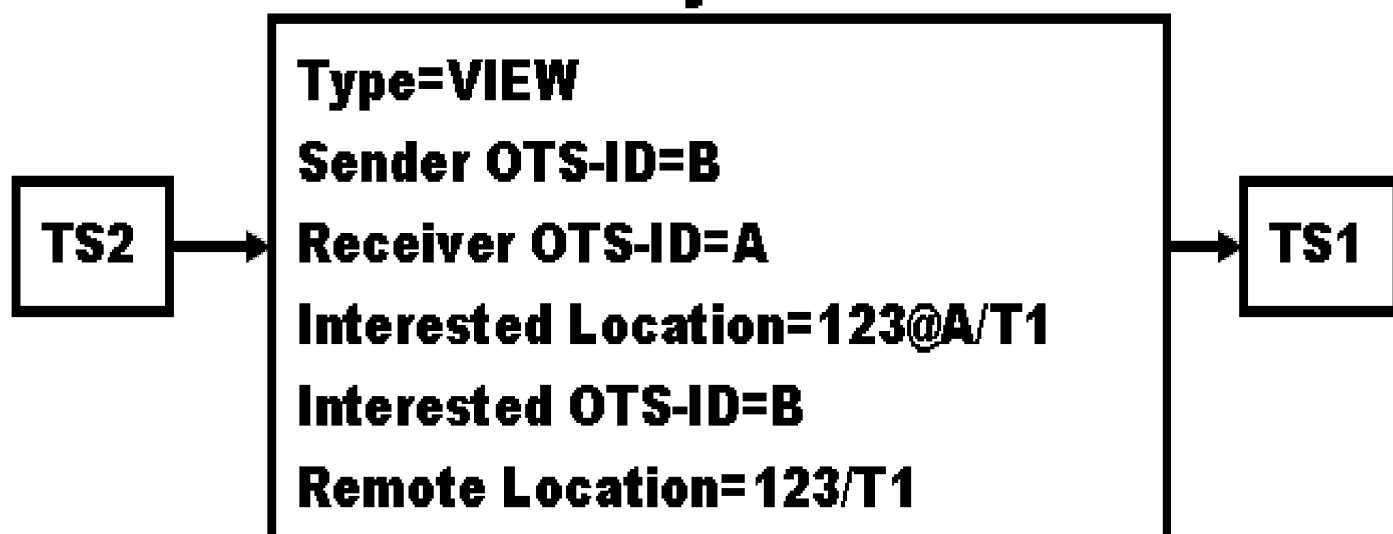
**View OTM sent to TS2 by TS4 when D views T1**



**View OTM sent to TS1 by TS2 to for the view request from D**

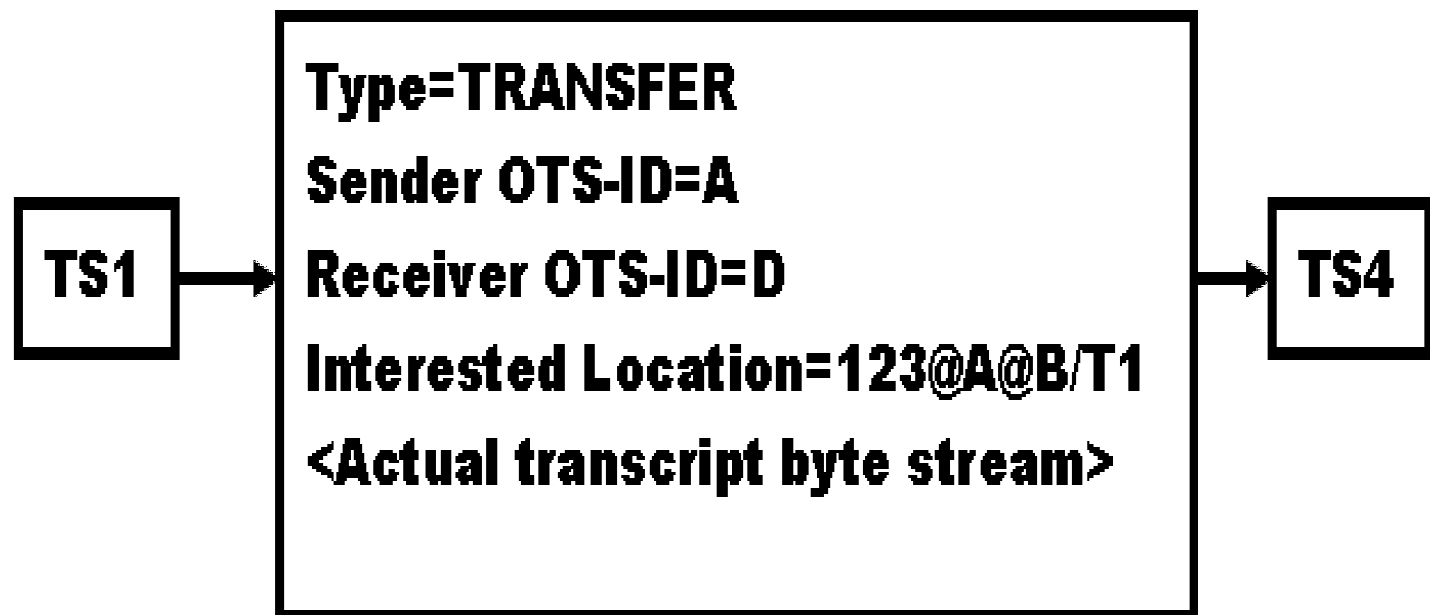


**View OTM sent to TS1 by TS2 when B views T1.**

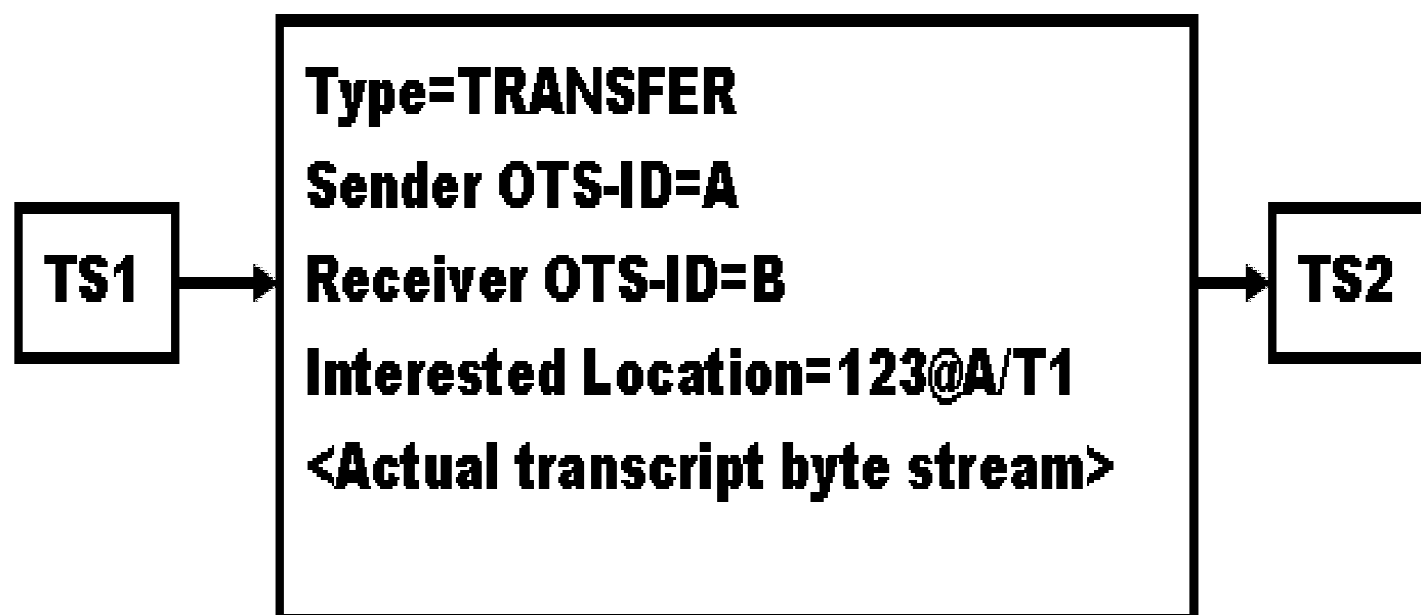


**Fig 7: TRANSFER OTM** →

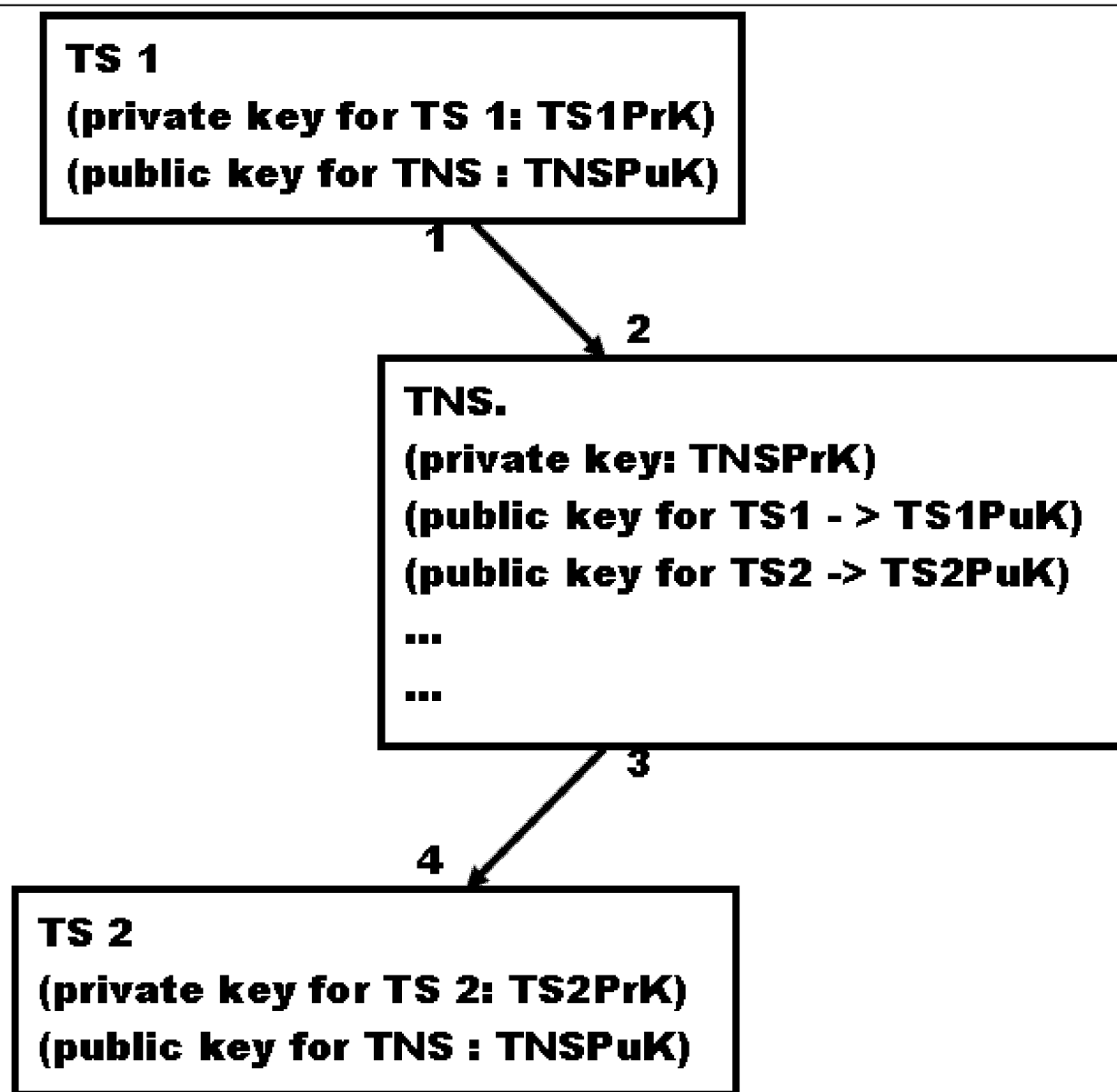
**Transfer OTM sent by TS1 to TS4 that completes the view request by D.**



**Transfer OTM sent by TS1 to TS2 that completes the view request by B.**



**Fig 8: VPTN** →

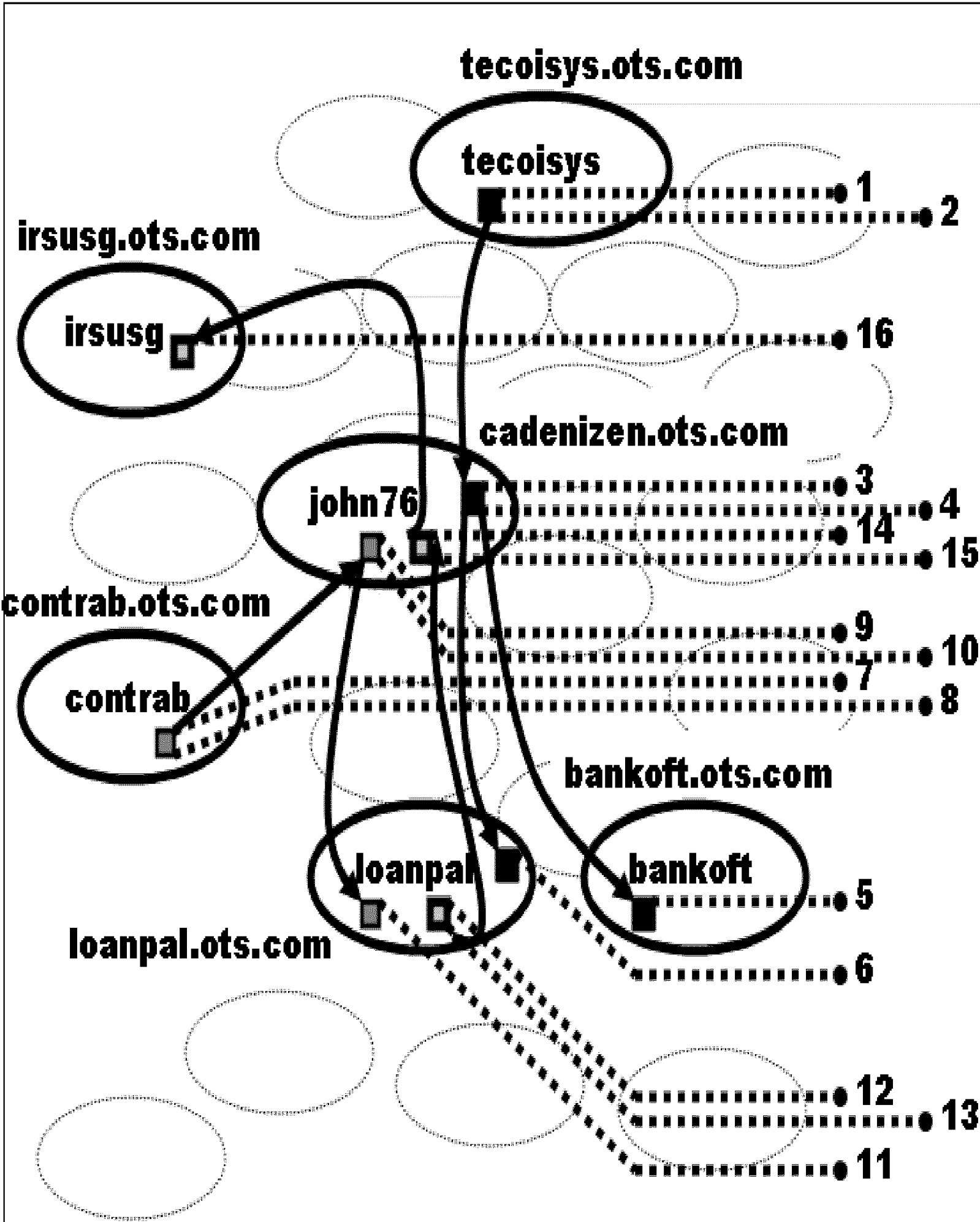


- 1-> TS1, encrypts with private key TS1PrK.
- 2-> TNS finds the incoming message to be from host address TS1. It finds public key of TS1 to be TS1PuK. It decrypts the message with TS1PuK. Confirms sender OTS-ID is from TS1.
- 3-> Encrypts the message with private key TNSPrK. Sends it to TS2 hosting the receiver OTS-ID.
- 4-> TS2 decrypts the message using public key TNSPuK.

**Fig 9: Users** 

<b>Name</b>	<b>Type</b>	<b>Transcript Server</b>	<b>OTS-ID</b>
<b>John Turner</b>	<b>Individual</b>	<b>cadenizen.ots.com</b>	<b>john76</b>
<b>Tecoi Systems</b>	<b>Company</b>	<b>tecoisys.ots.com</b>	<b>tecoisys</b>
<b>Bank Of Trust</b>	<b>Company</b>	<b>bankoft.ots.com</b>	<b>bankoft</b>
<b>Loan Pal</b>	<b>Company</b>	<b>loanpal.ots.com</b>	<b>loanpal</b>
<b>Contra bank</b>	<b>Company</b>	<b>contrab.ots.com</b>	<b>contrab</b>
<b>IRS USG</b>	<b>Company</b>	<b>irsusg.ots.com</b>	<b>irsusg</b>

**Fig 10: OTS state diagram** →



**Fig 11: State 1 and 2 relates to OTS-ID** →

**Transcript Server: tecoisys.ots.com**

**1→ tecoisys-table**

<b>RTL</b>	<b>Description</b>	<b>From OTS-ID</b>
<b>0228200410345400</b>	<b>VOE for John Turner</b>	<b>self</b>

**1→ 0228200410345400-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0228200 4103454 00\ VOE.pdf</b>	<b>VOE for John Turner</b>	<b>tecoisys: Iss</b>	<b>0228200 4103454 00\VOE.p df</b>	<b>self</b>

**2→ 0228200410345400-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0228200 4103454 00\ VOE.pdf</b>	<b>VOE for John Turner</b>	<b>tecoisys: Iss john76: app</b>	<b>0228200 4103454 00\VOE.p df</b>	<b>self</b>

**Fig 12: State 3 and 4 relates to OTS-ID john76** →

**Transcript Server: cadenizen.ots.com**

**3→ john76-table**

<b>RTL</b>	<b>Description</b>	<b>From OTS-ID</b>
<b>0228200410345400@tecoisys</b>	<b>VOE for John Turner</b>	<b>tecoisys</b>

**3→ 0228200410345400@tecoisys-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0228200410345400@tecoisys\VOE.pdf</b>	<b>VOE for John Turner</b>	<b>tecoisys: Iss john76: app</b>	<b>0228200410345400@tecoisys\VOE.pdf</b>	<b>tecoisys</b>

**4→ 0228200410345400@tecoisys-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0228200410345400@tecoisys\VOE.pdf</b>	<b>VOE for John Turner</b>	<b>tecoisys: Iss john76: app bankoft: Rev loanpal: Rev</b>	<b>0228200410345400@tecoisys\VOE.pdf</b>	<b>tecoisys</b>

**Fig 13: State 5 relates to OTS-ID bankoft →**

**Transcript Server: bankoft.ots.com**

**5-> bankoft-table**

<b>RTL</b>	<b>Description</b>	<b>From OTS-ID</b>
<b>0228200410345400 @tecoisys@john76</b>	<b>VOE for John Turner</b>	<b>john76</b>

**5-> 0228200410345400@tecoisys@john76-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0228200 4103454 00@teco isys@ john\ VOE.pdf</b>	<b>VOE for John Turner</b>	<b>tecoisys: lss john76: app bankoft: Rev</b>	<b>0228200 4103454 00@tecoi sys\VOE. pdf</b>	<b>john76</b>

**Fig 14: State 6 relates to OTS-ID loanpal** —→

**Transcript Server: loanpal.ots.com**

**6-> loanpal-table**

<b>RTL</b>	<b>Description</b>	<b>From OTS-ID</b>
<b>0228200410345400 @tecoisys@john76</b>	<b>VOE for John Turner</b>	<b>john76</b>

**6-> 0228200410345400@tecoisys@john76-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0228200 4103454 00@teco isys@ john76\ VOE.pdf</b>	<b>VOE for John Turner</b>	<b>tecoisys: lss john76: app loanpal: Rev</b>	<b>0228200 4103454 00@tecoi sys\VOE. pdf</b>	<b>john76</b>

**Fig 15: State 7 and 8 relates to OTS-ID** →

**Transcript Server: contrab.ots.com**

**7→ contrab-table**

<b>RTL</b>	<b>Description</b>	<b>From OTS-ID</b>
<b>0301200411234560</b>	<b>Account Statement for John Turner</b>	<b>self</b>

**7→ 0301200411234560-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0301200411234560\account.pdf</b>	<b>Account Statement for John Turner</b>	<b>contrab: Iss</b>	<b>0301200411234560\account.pdf</b>	<b>self</b>

**8→ 0301200411234560-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0301200411234560\account.pdf</b>	<b>Account Statement for John Turner</b>	<b>contrab: Iss john76: app</b>	<b>0301200411234560\account.pdf</b>	<b>self</b>

**Fig 16: State 9 and 10 relates to OTS-ID john76** →**Transcript Server: cadenizen.ots.com****9→ john76-table**

<b>RTL</b>	<b>Description</b>	<b>From OTS-ID</b>
<b>0228200410345400 @tecoisys</b>	<b>VOE for John Turner</b>	<b>tecoisys</b>
<b>0301200411234560 @contrab</b>	<b>Account Statement for John Turner</b>	<b>contrab</b>

**9→ 0301200411234560@contrab-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0301200 4112345 60@ contrab\ account. pdf</b>	<b>Account Statement for John Turner</b>	<b>contrab : lss john76: app</b>	<b>03012004 11234560 \ account .pdf</b>	<b>contrab</b>

**10→ 0301200411234560@contrab-transfer-table**

<b>Path</b>	<b>Descripti on</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>030120041 1234560@c ontrab\ account.pdf</b>	<b>Account Statemen t for John Turner</b>	<b>contrab: lss john76: app loanpal: Rev</b>	<b>03012001 1234560\ account. pdf</b>	<b>contrab</b>

**Fig 17: State 11 relates to OTS-ID loanpal** →

**Transcript Server: loanpal.ots.com**

**11-> loanpal-table**

<b>RTL</b>	<b>Description</b>	<b>From OTS-ID</b>
<b>0228200410345400 @tecoisys@john76</b>	<b>VOE for John Turner</b>	<b>john76</b>
<b>0301200411234560 @contrab@john76</b>	<b>Account Statement for John Turner</b>	<b>john76</b>

**11-> 0301200411234560@contrab@john76-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0301200 4112345 60@ contrab @ john76\ account .pdf</b>	<b>VOE for John Turner</b>	<b>contrab: Iss john76: app loanpal: Rev</b>	<b>0228200 4103454 00@ contrab\ account .pdf</b>	<b>john76</b>

**Fig 18: State 12 and 13 relates to OTS-ID loanpal** →

**Transcript Server: loanpal.ots.com**

**12→ loanpal-table**

<b>RTL</b>	<b>Description</b>	<b>From OTS-ID</b>
<b>0401200409002000</b>	<b>Loan for John Turner</b>	<b>self</b>

**12→ 0401200409002000-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0401200 4090020 00\ loan.pdf</b>	<b>Loan for John Turner</b>	<b>loanpal: Iss</b>	<b>0401200 4090020 00\loan .pdf</b>	<b>self</b>

**13→ 0401200409002000-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0401200 4090020 00\ loan.pdf</b>	<b>Loan for John Turner</b>	<b>loanpal: Iss john76: app</b>	<b>0401200 4090020 00\loan .pdf</b>	<b>self</b>

**Fig 19: State 14 and 15 relates to OTS-ID john76** →**Transcript Server: cadenizen.ots.com****14-> john76-table**

<b>RTL</b>	<b>Description</b>	<b>From OTS-ID</b>
<b>022820041034 5400@tecoisys</b>	<b>VOE for John Turner</b>	<b>tecoisys</b>
<b>030120041123 4560@contrab</b>	<b>Account Statement for John Turner</b>	<b>contrab</b>
<b>040120040900 2000@loanpal</b>	<b>Loan for John Turner</b>	<b>loanpal</b>

**14-> 0401200409002000@loanpal-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0401200 4090020 00@loan pal \ loan.pdf</b>	<b>Loan for John Turner</b>	<b>loanpal: Iss john76: app</b>	<b>0401200 4090020 00\loan .pdf</b>	<b>loanpal</b>

**15-> 0401200409002000@loanpal-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>04012004 09002000 @loanpal\ loan.pdf</b>	<b>Loan for John Turner</b>	<b>loanpal: Iss john76: app irsusg: rev</b>	<b>040120040 9002000\ loan .pdf</b>	<b>loanpal</b>

**Fig 20: State 16 relates to OTS-ID irsusg**      ↘

**Transcript Server: irsusg.ots.com**

**16-> irsusg-table**

<b>RTL</b>	<b>Description</b>	<b>From OTS-ID</b>
<b>0401200409002000@loanpal@john76</b>	<b>Loan for John Turner</b>	<b>john76</b>

**0401200409002000@loanpal@john76-transfer-table**

<b>Path</b>	<b>Description</b>	<b>Role</b>	<b>Remote Path</b>	<b>Transfer</b>
<b>0401200409002000@loanpal@john76\loan.pdf</b>	<b>Loan for John Turner</b>	<b>loanpal: Iss john76: app irsusg: rev</b>	<b>0401200409002000@loanpal\loan .pdf</b>	<b>john76</b>